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EUROPEAN PATENT APPLICATION

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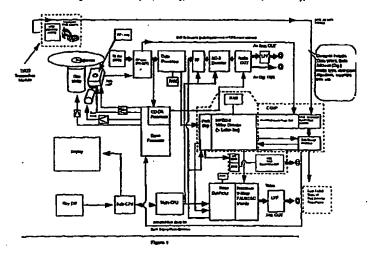
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 AL LT LV MK RO SI
- (30) Priority: 20.12.1996 US 33543 P
- (71) Applicant: Texas Instruments Incorporated Dallas, Texas 75251 (US)
- (54) Improvements in or relating to security systems
- (57)The invention consists of attaching or embedding a "TIRIS" transponder (or other RF or IR or barcode or other identifying device) physically into the center of the proposed DVD disk. Once a disk is input to a media player, the interrogation portion of the media player transmits an interrogation signal to the transponder located on the disk. Once empowered with the interrogation signal, the transponder accesses the predetermined address, code word, encryption algorithms, media type information, and copyright information from it's memory. Then the transponder transmits the address, the code word, encryption algorithms, media type information and copyright information to the interrogator, located within the media player, and the interrogator sends the transponder data stream to a conditional access management processor(CAMP)... Simultaneously with the processing action of the CAMP. the interrogator instructs the player to access the data_word at the predetermined address on the disk and the player accesses the data_word on the disk. The media player only plays if there is a match between the read data_word and received code word and the received algorithm correctly decrypts the content of the media prior to decoding.

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Block Diagram of DVD Ptayer (ROM Type for Published Media) + TIRIS cypher





EUROPEAN SEARCH REPORT

Application Number EP 97 12 2526

	DOCUMENTS CONSI	DERED TO BE RELEVANT	44.	
Category	Citation of document with of relevant par	indication, where appropriate, isages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (INLCLS)
A .	US 5 461 386 A (KN 24 October 1995 * abstract * * column 1 * * column 2 * * column 3, line 1	- line 49 *	1,5	G11B20/00 G11B23/28
	* column 4, line 3 * column 5, line 1 * figures IA,1B,1C	7 - line 67 * - line 8 *		
A	"TIRIS ZET AUTODI POLYTECHNISCH TIJD ELEKTROTECHNIEK, E vol. 49. no. 5, Ma XP000454909 * the whole document	SCHRIFT, LEKTRONICA, y 1994, page 7	1,5	
١	US 5 287 112 A (SCI 15 February 1994 * abstract * * column 1, line 1		1,5	TECHNICAL FELDS SEARCHED (Mr.CIS)
	US 4 827 395 A (ANI 2 May 1989 * abstract * * column 1. line 50 * column 2 * * column 3 * * column 6. line 1 * column 7 * * column 8. line 1 * column 11. line 0 * column 11, line 1 * column 12, line 1 * column 12, line 1 * column 19, line 1	- line 14 * 5 - line 68 * - line 45 * 5 - line 16 * 55 - line 68 * 1 - line 16 *	1,5	G118 G01S G06K G07C H04L
	The present search report has			
	Place of stauch THE HAGUE	Date of completion of the search 1. Enhance 1000	Dam	Extraine a 1 — Fauchoux C
X : partic Y : partic docur A : techn	THE TRACE ITEGORY OF CITED DOCUMENTS Cularly relevant of taken alone cularly relevant of cambined with ano meht of the same category sological background written disclosure mediate document	E : earlier patent d after the filling d	ple underlying the is ocument, but publicate are in the application for other reasons	shed an, of



EUROPEAN SEARCH REPORT

Application Number

	DOCUMENTS CONSI	DERED TO BE RELEVANT	<u> </u>	
Category	Citation of document with of relevant pas	indication, where appropriate, isages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (nLCL6)
A .	US 5 499 017 A (BE 12 March 1996 * abstract * * column 1 * * column 2, line 1 * column 3, line 6 * column 4, line 1	- line 26 * 5 - line 67 *	1,5	
A	US 5 430 441 A (BI 4 July 1995 * abstract * * column 1. line 1	CKLEY ROBERT H ET AL) 3 - line 45 *	1,5	
A	US 4 918 955 A (KI 24 April 1990 * abstract * * column 3, line 1 * figure 3 *	MURA TAKASHI ET AL) O - line 34 *	1,5	
A	US 5 245 332 A (KA 14 September 1993 * abstract *	TZENSTEIN HENRY S)	1,5	TECHNICAL FIELDS SEARCHED (Int.CLG)
P,A	EP 0 805 575 A (TE) 5 November 1997 * abstract * * page 2 * * page 3. line 1 - * page 4, line 20 - * page 5 * * page 6 * * figure 4 *			
	•	. ~/		
	The present search report has	been drawn up for all claims		
	Place of search	Date of completion of the seech		Execution
X : parti Y : parti docu	THE HAGUE ATEGORY OF CITED DOCUMENTS cutarly relevant if taken alone cutarly relevant if combined with and reset of the same category notopical background	E : earlier patent do after the filing da ther D : document cited L : document cited (le underlying the recurrent, bul public to in the application for other reasons	shed on, or
Q:non-	written disclosure mediate document	& : member of the s document	ame palent family	, corresponding



EUROPEAN SEARCH REPORT

Application Number

EP 97 12 2526

	Citation of downward with 1-	RED TO BE RELEVANT	Relevant	AL - COURSE - TON ART -	
alegory	of relevant passa	ges	to claim	CLASSIFICATION OF THE APPLICATION (Int.CLS)	
Α	US 5 450 087 A (HURT 12 September 1995 * abstract * * column 2, line 21 * column 3, line 1 - * column 3, line 65 * column 4, line 1 - * column 7, line 44 * column 18, line 51 * column 19. line 1	- line 68 * - line 3 * - line 68 * - line 9 * - line 47 * - line 68 *	1,5	appears for jini.cog	
				TECHNICAL FIELDS SEARCHED (InLCI.6)	
	The present search report has be Place of search THE HAGUE	ten drawn up for all claims Date of completion of the search 1 February 1999	Bare	Examiner 1-Faucheux, C	
X : parti Y : parti docu A : tech O : non-	ATEGORY OF CITED DOCUMENTS cularly relevant if carboned with anothe cularly relevant if combined with anothe ment of the same category nological background within disclosure mediate document	E: earlier patent document of the filing date or O: document chad in I. document cited for S: member of the sam	T : theory or principle underlying the Invention E : earlier patient document, but published on, or after the filling date D : document cried in the application L : document cried to other leasures		

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 97 12 2526

This arriex lists the patent family members retained to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on

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01-02-1999

	Patent document ed in search rep		Publication date		Patent family member(s)	• Publication date
υs	5461386	A	24-10-1995	JP	8296354 A	12-11-199
				. US	5561430 A	01-10-199
US	5287112	A	15-02-1994	EΡ	0674298 A	27-09-199
				JP	7131376 A	19-05-199
				US	5374930 A	20-12-199
บร	4827395	A	02-05-1989	US	4656463 A	07-04-198
				CA	1249359 A	24-01-198
				FR	2544867 A	26-10-198
				GB	2141006 A,B	05-12-198
				JP	60100294 A	04-06-198
บร	5499017	A	12-03-1996	AU	665797 B	18-01-199
				EP	0615645 A	21-09-199
	·			JP	7504771 T	25-05-199
US	5430441	Α	04-07-1995	NON		
US	4918955	A	24-04-1990	JP	1737326 C	26-02-199
				JP	4015141 B	17-03-199
				JP	63093649 A	23-04-198
US	5245332	A	14-09-1993	CA	1316268 A	13-04-199
				DE	68928801 D	08-10-199
				ЭG	68928801 T	14-01-199
				EP	0347893 A	27-12-198
		·		JP	2051931 A	21-02-199
EP	0805575	Α	05-11-1997	JP	10075241 A	17-03-199
US	5450087	A	12-09-1995	JP	8084095 A	26-03-199
				IJS	5686920 A	11-11-199

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

BNSDOCID: <EP__0849734A3_j_

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